with the proviso that A is not any of the following nucleotide sequences selected from a group consisting of SEQ ID NO:33, SEQ ID NO:35, SEQ ID NO:37, SEQ ID NO:39 and SEQ ID NO:41.

As corrected

REMARKS

In response to the Notice to Comply with Requirements for Patent Applications Containing Sequence and/or Amino Acid Disclosures, the specification has been amended to replace the previously filed Sequence Listing with a replacement Sequence Listing. No new subject matter is added. Applicants also enclose a copy of the sequence listing in computer readable form. It is Applicants' understanding that the application now meets the requirements of §§ 1.821 and 1.825.

Claims 1, 33, and 42 have been amended. Claim 77 has been added. Support for the above amendments can be found in the claims as originally filed, as well as throughout the specification. Support for new claim 77 can be found in claims 1 and 33 as originally filed.

No new matter has been added. For the Examiner's convenience, a copy of the claims as pending after amendment is provided in Appendix A.

Amendment of the claims should in no way be construed as an acquiescence to any of the Examiner's rejections and was done solely to expedite the prosecution of the application. Applicants reserve the right to pursue the claims as originally filed in this or a separate application(s).

RESPONSE TO RESTRICTION REQUIREMENT

The Examiner has required restriction of the invention to one of the following six groups under 35 U.S.C. §121:

I. Claims 1-17, 30-31, 63-65, 69-71 and 75-76, drawn to B7-1 specific nucleic acids, and expression vector and host cells, classified in Class 536, subclass 23.1 and 23.5 and Class 435, subclasses 69.1, 70.1, 71.1, 172.1 and 320.1.

II. Claims 18-29, 66-68 and 72-74, drawn to B7-1-specific proteins, classified in Class 530, subclass 350,395.

III. Claims 32 and 62, drawn to B7-1 specific antibodies, classified in Class 530, subclass 387.1.

IV. Claims 33-47 and 60-61, drawn to B7-2-specific nucleic acids, and expression vector and host cells, classified in Class 536, subclass 23.1 and 23.5 and Class 435, subclasses 69.1, 70.1, 71.1, 172.1 and 320.1.

V. Claims 48-59, drawn to B7-2-specific proteins, classified in Class 530, subclass 350, 395.

VI. Claim 62, drawn to B7-2-specific antibodies, classified in Class 530, subclass 387.1.

Applicants hereby elect Group I, with traverse, on the grounds that Groups I and IV should properly be regrouped as a single group containing claims 1-17, 30-31, 33-47, 60-61, 63-65, 69-71 and 75-77 (referred to hereinafter as "newly formed Group I").

Applicants grounds for traversal are set forth below.

Applicants believe the restriction requirement under 35 U.S.C. §121 to be improper on the grounds that Applicants have presented allowable generic claim, claim 77 which

embrace the species of nucleic acid molecules set forth in claims 1-17, 30-31, 33-47, 60-61, 63-65, 69-71 and 75-76. Specifically, claim 77 is directed to isolated nucleic acid molecules having the structure shown in claim 1 or claim 33, in the alternative. Therefore, claim 77 is generic to groups I and IV as presented by the Examiner. In view of the presence of generic claim 77, which links the species of nucleic acid molecules of claims 1 and 33, a restriction under 35 U.S.C. §1.121 is improper.

Moreover, Applicants point out that the subject nucleic acids cannot properly be grouped as B7-1 or B7-2 specific nucleic acids, expression vector and host cells as suggested by the Examiner because the claimed nucleotide sequences can be derived from any costimulatory molecule gene, so long as it does not comprise a nucleotide sequence shown in SEQ IN NO: 25, 27, 29, or 31. For example, claim 1 is drawn to an isolated nucleic acid molecule which binds to CD28 or CTLA4 comprising a contiguous nucleotide sequence which is derived from at least one T cell costimulatory molecule gene, which can be represented by the formula A-B-C-D-E. A comprises a nucleotide sequence of at least one first exon of a T cell costimulatory molecule gene, wherein the at least one first exon encodes a signal peptide domain. B comprises a nucleotide sequence of at least one second exon of a T cell costimulatory molecule gene, wherein the at least one second exon encodes an immunoglobulin variable region-like domain. C comprises a nucleotide sequence of at least one third exon of a T cell costimulatory molecule gene, wherein the at least one third exon encodes an immunoglobulin constant region-like domain. D comprises a nucleotide sequence of at least one fourth exon of a T cell costimulatory molecule gene, wherein the at least one fourth exon encodes a transmembrane domain. E comprises a nucleotide sequence of at least one fifth exon of a T cell costimulatory molecule gene, wherein the at least one fifth exon encodes a cytoplasmic domain. These nucleotide sequences can be derived from any costimulatory molecule gene, with the proviso that E does not comprise any nucleotide sequence selected from a group consisting of mouse B7-1 exon 5 (SEQ ID NO:25), human

B7-1 exon 5 (SEQ ID NO:27), mouse B7-2 exon 5 (SEQ ID NO:29) and human B7-2 exon 5 (SEQ ID NO:31). The claim does not limit the costimulatory molecule from which the A, B, C, D, or E nucleotide sequence is derived. Thus, the claim embraces sequences derived from B7-1 and/or B7-2. Similarly, dependent claims 10, 11, 34, 35, 41, 42, 75, and 76 are drawn to nucleic acid molecules which comprise sequences derived from *any* costimulatory molecule, with no limitation as to the source.

While dependent claims 4-8, 12-17, 30, 31, 64-65, and 70-71 are drawn to nucleic acid molecules which comprise sequences derived from B7-1, these novel compositions can also include sequences derived from other costimulatory molecules, e.g., B7-2. Similarly, dependent claims 36-39, 43-47, and 60-61 are drawn to nucleic acid molecules which comprise sequences derived from B7-2. However, these dependent claims can also comprise specific sequences from a different costimulatory molecule.

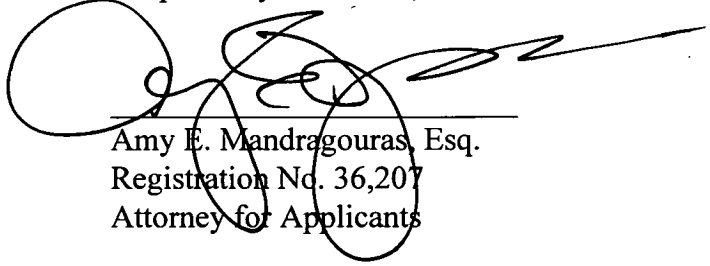
Therefore, in view of the above ***Applicants hereby elect newly formed Group I, claims 1-17, 30-31, 33-47, 60-61, 63-65, 69-71 and 75-77 for prosecution on the merits.***

It is also Applicants position that the corresponding protein claims, Groups II and V (claims 18-29, 48-59, 66-68, and 72-74), should be regrouped as a single group and the antibody claims Groups III and VI (32 and 62) should also be regrouped into a single group for the reasons set forth above.

SUMMARY

If a telephone conversation with Applicants' Attorney would expedite the prosecution of the above-identified application, the examiner is urged to call Applicants' Attorney at (617) 227-7400.

Respectfully submitted,



Amy E. Mandragouras, Esq.
Registration No. 36,207
Attorney for Applicants

LAHIVE & COCKFIELD, LLP
28 State Street
Boston, MA 02109
Tel. (617) 742-4214

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